

AN ANNOTATED SYNONYMIC LIST OF NORTH AMERICAN AND
CARIBBEAN WASPS OF THE GENUS *CERCERIS*
(HYMENOPTERA: PHILANTHIDAE)¹

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Abstract.—Results of a study of primary types representing 258 species-group names in the genus *Cerceris* are presented: 43 new synonyms are proposed; 14 names are removed from synonymy and given species status; 10 names previously recognized as subspecies are elevated to species status; one name is removed from synonymy and given subspecies status; three names are reduced from species to subspecies status; and eight names are transferred from the synonymy of one species to that of another. *Cerceris nitdoides* Ferguson is proposed as a *New Name* for the preoccupied *Cerceris nitida* Banks.

As part of a study of North American and Caribbean wasps of the genus *Cerceris* I have examined primary types representing 258 species-group names. The resulting new and revised synonymy is presented as an annotated list. Included species are those known to occur in North America, south to and including Panama, and the islands of the Caribbean other than Trinidad. Exclusive of new names, emendations, and misspellings, some 294 species-group names have been applied to *Cerceris* occurring within the geographic limits indicated. Ferguson and Vardy (1983) removed *Cerceris serripes* (Fabricius) from the North American faunal list, showing that it was a junior subjective synonym of the palaearctic *Cerceris arenaria* (Linnaeus).

Of the remaining 293 species-group names, 137 are recognized as valid species and four as subspecies. Ten names previously treated as subspecies

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are elevated to species rank, and 15 species-group names are removed from synonymy and recognized as valid species or subspecies. Three taxa are here reduced from species to subspecies status. Seven species-group names are transferred from the synonymy of one species to that of another. Twenty-seven species-group names are synonymized because of conspecificity of types (10 of these by sex association); and 16 species-group names previously treated as subspecies are synonymized under the nominate species. One new name, *C. nitidoides* Ferguson, is proposed for the preoccupied *C. nitida* Banks, here elevated to species status.

Color variation. Sexual dimorphism has led to the description of the opposite sexes as different species in many cases. However, the plethora of names is due largely to extensive color variation in widely distributed species with many color variants having been described as species or as infraspecific taxa. Bohart and Grissell (1975) synonymized many of the color variants which had been recognized as subspecies by Scullen (1965a, 1972). Color variation in most cases is clinal, and species with similar distributions often show similar geographic patterns of color variation. I attribute this to convergent responses to extrinsic environmental conditions and do not consider such variants as worthy of subspecies recognition. These color variants have been given names by previous authors in some cases but not in others. If one were to be consistent in naming color forms, a large number of additional names would have to be created. In their Philanthinae of California, Bohart and Grissell (1975) consistently ignored these variations in shade and extent of pale maculations as criteria for establishing taxonomic entities. As a general rule I have followed the same policy in this paper.

One common pattern of variation is the gradual transition in shade of pale markings from yellow to white in a south to north cline among several western species (e.g., *C. aequalis*, *C. calochorti*, *C. nigrescens*, *C. vanduzeei*). Another pattern (e.g., *C. californica*, *C. sexta*) is the development of broad pale bands on the terga in the southwestern deserts with a gradually increasing amount of melanism exhibited in both northerly and southerly directions. Several species widely distributed in eastern North America exhibit a tendency toward a red instead of black background color in Florida and adjacent southeastern states (e.g., *C. blakei*, *C. flavofasciata*, *C. compar*, *C. rufopicta* and *Philanthus sanbornii*). Some widely distributed eastern species have extended their ranges into the southwestern states where they exhibit a clinal change from yellowish to whitish pale markings and a gradually increasing amount of pale color on the body (e.g., *C. compar*, *C. compacta*, *C. insolita*). I do not consider it useful to designate these kinds of variation as subspecies.

Other cases of color convergence are apparently due to mimicry. Saussure (1867) pointed out the resemblance of color pattern of *C. simulans* to that of *Polybia emaciata* Lucas (misidentified by Saussure as *Polybia fasciata*

according to Richards, 1978). *C. militaris* and *C. scapularis* have similar patterns of pale markings. In the northern part of their ranges *C. azteca*, *C. bakeri*, *C. dilatata*, and *C. tolteca*, each belonging to a different species group, exhibit broad pale bands on the posterior terga similar to the color pattern of some social wasps of the genus *Brachygastra*. In Costa Rica and adjacent areas *C. bakeri*, *C. kennicottii*, and *C. mexicana* exhibit a color pattern similar to that of *Polybia occidentalis bohemani* Holmgren, having an almost completely yellow propodeum with posterior tergal markings reduced. I divide *C. bakeri*, *C. kennicottii* and *C. mexicana* into subspecies based on this pattern of mimicry, which may have biological significance.

Differences in color pattern, as opposed to differences in shade of color or size of maculations within the same pattern, are important taxonomic characters, but such differences in pattern are almost always associated with differences in structural morphology.

Format. All species-group names are listed alphabetically whether originally described as specific or infraspecific taxa. Synonyms are italicized and placed in parentheses with the name of the valid species under which each is cited. A generalized summary of geographic distribution is given after each name. [Abbreviations used are n., s., e., w. and c. for north, south, east, west and central respectively]. Under each valid name is placed the bibliographic citation to the original description or emendation for each name included in the synonymy. The original orthography is used in the literature citation.

An asterisk (*) following the species-group name in the bibliographic citation indicates that I have studied the type. A double asterisk (**) indicates that a type comparison has been made by C. R. Vardy of the British Museum (Natural History) using specimens supplied by me. Insofar as possible I have placed in brackets the sex, type locality, and location of the type specimen(s) following each bibliographic citation. If a neotype or lectotype has been designated, the reference to such designation is given. Immediately following the brackets I have attempted to give the first author and citation for the synonymy.

Type repositories. The following abbreviations for type repositories are used in the text:

- AMNH—American Museum of Natural History, New York
- ANSP—Academy of Natural Sciences of Philadelphia
- Berlin—Zoologisches Museum, Humboldt Universität, Berlin (DDR)
- BMNH—British Museum (Natural History), London
- BPBM—Bishop Museum, Honolulu, Hawaii
- CAS—California Academy of Sciences, San Francisco
- Geneva—Museum d'Histoire Naturelle, Geneva

- Genoa—Museo Civico di Storia Naturale, Genoa, Italy
 Halle—Zoologisches Institut, Martin Luther Universität, Halle am Saale, DDR
 Havana—Academia de Ciencias de Cuba, Havana
 KANS—University of Kansas, Lawrence
 Lund—Universitets Zoologiska Institut, Lund, Sweden
 MACN—Museo Argentino de Ciencias Naturales “Bernardino Rivadavia,” Buenos Aires
 Madrid—Museo Nacional de Ciencias Naturales de Madrid
 MCZ—Museum of Comparative Zoology, Cambridge, Massachusetts
 NCDA—North Carolina State Department of Agriculture, Raleigh
 NEB—University of Nebraska State Museum, Lincoln
 Torino—Museo ed Istituto Zoologia Sistemica, Torino, Italy
 UCD—University of California, Davis
 USNM—United States National Museum of Natural History, Washington
 Vienna—Naturhistorisches Museum Wien, Vienna

LIST OF NORTH AMERICAN AND CARIBBEAN *Cerceris*

(*abbreviata* Banks = *nigrescens* F. Smith)

acanthophila Cockerell sw. U.S., n. Mexico

*Cerceris acanthophilus** Cockerell, 1897:135. [Male lectotype, Deming, New Mexico, designated by Cresson (1928); ANSP No. 10038].

*Cerceris chilopsidis** Viereck and Cockerell, 1904:136. [Female holotype, Rincon, New Mexico; ANSP No. 10375]. Synonymy by Banks (1947), Ferguson (1983b).

Ferguson (1983b) reviewed previous misapplications of the name *acanthophila*.

acolhua Saussure Mexico

*Cerceris acolhua** Saussure, 1867:90. [Male lectotype, Mexico, designated by Ferguson (1984); Geneva]

Scullen (1972) left *C. acolhua* as an unrecognized species. It is allied to, but distinct from, *C. occipitamaculata* Packard. The female is unknown.

aequalis Provancher sw. Canada to nw. Mexico

*Cerceris aequalis** Provancher, 1888:417. [Female lectotype, California, designated by Gahan and Rohwer (1917); USNM].

*Cerceris aequalis idahoensis** Scullen, 1965a:454. [Female holotype, Craig's Mountain, Idaho; ANSP No. 5040]. **New Synonymy.**

Scullen (1965a) separated *idahoensis* from the nominate subspecies by its creamy white versus yellow pale markings. As in some other western species, these markings vary from yellow to whitish in a south to north cline.

(*affumata* Schletterer = *intricata* F. Smith)

alacris Mickel (Revised Status) sc. U.S.

*Cerceris alacris** Mickel, 1918:334. [Female holotype, Mitchell, Nebraska; NEB].

Scullen (1965a) incorrectly synonymized *alacris* under *C. halone* Banks. They are distinct species.

alamos Scullen w. Mexico

*Cerceris alamos** Scullen, 1972:18. [Female holotype, 10 mi. se. Alamos, Sonora, Mexico; CAS].

alaope Banks (Revised Status) e. U.S.

*Cerceris alaope** Banks, 1912:22. [Male lectotype, Falls Church, Virginia, designated by Ferguson (1983a); MCZ No. 13784].

*Cerceris banksi** Scullen, 1965a:461. [Female holotype, Falls Church, Virginia; MCZ No. 30477]. **New Synonymy.**

Synonymy is by sex association. Scullen (1942) incorrectly synonymized *alaope* under *C. prominens* Banks.

(*albida* Scullen = *insolita* Cresson)

(*albigera* Taschenberg = *cribrosa* Spinola)

(*albinota* Scullen = *compar* Cresson)

(*alceste* Mickel = *sexta* Say)

(*ampla* Banks = *intricata* F. Smith)

(*arbuscula* Mickel = *atramontensis* Banks)

(*architis* Mickel = *halone* Banks)

arelate Banks (Revised Status) se. Canada, ne. U.S.

*Cerceris arelate** Banks, 1912:18. [Female holotype, Great Falls, Virginia; MCZ No. 13779].

*Cerceris nigritulus** Banks, 1915:402. [Male holotype, Colden, New York; MCZ No. 13782]. Synonymy by Scullen (1965a).

*Cerceris crawfordi** Brimley, 1928:199. [Male holotype, Raleigh, North Carolina; NCDA]. Synonymy by Scullen (1965a).

Scullen (1965a) treated *arelate* as a yellow marked subspecies of *C. nigrescens* F. Smith, and Bohart and Grissell (1975) synonymized the two forms. *C. arelate* is distinct from *C. nigrescens* in having a triangular median tooth on the apical margin of the clypeal midsection, whereas in *nigrescens* this tooth is rectangular.

(*argia* Mickel = *rufinoda* Cresson)

(*argyrotricha* Rohwer = *californica* Cresson)

(*arizonella* Banks = *vierecki* Banks)

(*arno* Banks = *californica* Cresson)

astarte Banks se. Canada, e. U.S.

*Cerceris astarte** Banks, 1913b:424. [Female lectotype, Falls Church, Virginia, designated by Ferguson (1983a); MCZ No. 13788].

(*athene* Banks = *femurrubrum* Viereck and Cockerell)

(*atlaconomulca* Scullen = *flavida* Cameron)

(*atrafemori* Scullen = *insolita* Cresson)

atramontensis Banks se. Canada, e. U.S.

*Cerceris atramontensis** Banks, 1913b:425. [Female holotype, Valley of Black Mountains, North Carolina; AMNH].

*Cerceris arbuscula** Mickel, 1916:410. [Female holotype, Omaha, Nebraska; NEB]. Synonymy by Scullen (1951).

Scullen (1965a) incorrectly stated that the type of *atramontensis* was at the MCZ.

(*atrata* Scullen = *echo* Mickel)

(*aureofacialis* Cameron = *compacta* Cresson)

(*austrina* Fox = *rufopicta* F. Smith)

azteca Saussure sw. U.S. to Nicaragua

*Cerceris azteca** Saussure, 1867:97. [Female lectotype, Cuantla, Mexico, designated by Ferguson (1984); Vienna].

Cerceris (Apiratirix) [sic] *seminigra** Banks, 1947:33, nec Taschenberg 1875. [Male holotype, Patagonia, Arizona; MCZ No. 27621]. Synonymy by Scullen (1961).

→ **bakeri bakeri** Cameron (Revised Status) El Salvador to Costa Rica

*Cerceris bakeri** Cameron, 1904:67. [Female lectotype, Chinandega, Nicaragua, designated by Ferguson (1984); BMNH].

bakeri parkeri Scullen (Revised Status) sw. U.S. to Guatemala

*Cerceris parkeri** Scullen, 1972:35. [Female holotype, 48 mi. nw. Tehuantepec, Oaxaca, Mexico; USNM].

Scullen (1972) misidentified *bakeri* and used the name as a subspecies of *C. kennicottii* Cresson. However, the type of *C. bakeri* is conspecific with *C. parkeri*. The nominate subspecies has a yellow tergum I and yellow propodeum with reduced pale markings on the terga. It is apparently a mimic of *Polybia occidentalis bohemani* Holmgren. The subspecies *parkeri* has tergum I and the propodeum mostly or entirely black and terga III–V are broadly banded with yellow apparently mimicking *Brachygastra azteca* (Saussure), another common polybiine wasp.

(*banksi* Scullen = *alaope* Banks)

(*beali* Scullen = *kennicottii* Cresson)

(*belfragei* Banks = *compacta* Cresson)

(*bicornis* Ashmead = *bicornuta* Guerin)

bicornuta Guerin U.S., n. Mexico

Cerceris bicornuta Guerin, 1844:443. [Female holotype, New Orleans, Louisiana; Genoa].

Cerceris dufourii Guerin, 1844:443. [Male holotype, New Orleans, Louisiana; Genoa]. Synonymy by Cresson (1875).

*Cerceris venator** Cresson, 1865:116. [Male lectotype, Illinois, designated by Cresson (1916); ANSP No. 1937]. Synonymy by Cresson (1875).

*Cerceris curvicornis*** Cameron, 1890:124. [Male holotype, Mazatlan, Mexico; BMNH]. Synonymy by Scullen (1961).

Cerceris bicornis Ashmead, 1899:295. *Lapsus*.

*Cerceris fidelis** Viereck and Cockerell, 1904:132. [Female holotype, Santa Fe, New Mexico; ANSP No. 10379]. Synonymy by Bohart and Gris-sell (1975).

Cerceris venatrix Schulz, 1906:195. Emendation.

(*bifida* Scullen = *rufopicta* F. Smith)

(*bilinieata* Schletterer = *triangulata* Cresson)

(*bilunata* Cresson = *triangulata* Cresson)

binodis Spinola s. Mexico to Argentina

*Cerceris binodis** Spinola, 1841:117. [Male lectotype, Cayenne, French Guiana, designated by Ferguson (1984); Torino].

Diamma spinolae Dahlbom, 1844:225. Described in synonymy.

*Cerceris viduata*** F. Smith, 1856:463. [Female holotype, Para, Brasil; BMNH]. Synonymy by Fritz (1971).

Cerceris singularis Brethes, 1910:265. [Female holotype, Cordoba, Argentina; MACN]. Synonymy by Fritz (1971).

(*biungulata* Cresson = *sexta* Say)

(*blackii* Schletterer = *blakei* Cresson)

blakei Cresson e. U.S.

*Cerceris elegans** F. Smith, 1856:467, nec Eversmann 1849. [Male lectotype, St. John's Bluff, E. Florida, designated by Ferguson (1984); BMNH].

*Cerceris blakei** Cresson, 1865b:121. [Female holotype, Georgia; ANSP No. 1947]. Synonymy by Scullen (1961).

Cerceris blackii Schletterer, 1887:487. *Lapsus*.

Cerceris elegantissima Schletterer, 1887:490. New name for *Cerceris elegans* F. Smith.

Scullen (1961) was correct in stating that *elegantissima* was proposed as a new name for *Cerceris elegans* F. Smith, but he was later (Scullen 1965a) incorrect in stating that it was proposed as a new name for *Eucerceris elegans* Cresson.

boharti Scullen sw. U.S., n. Mexico

*Cerceris boharti** Scullen, 1965a:466. [Female holotype, Mount Lemmon Lodge, Santa Catalina Mountains, Arizona; UCD].

bolingeri Scullen (New Status) nw. U.S.

*Cerceris aequalis bolingeri** Scullen, 1965a:453. [Female holotype, Hart Mountain, Jacob's Cabin, Lake County, Oregon; USNM].

Although described as a subspecies of *aequalis*, this taxon is a morphologically distinct species.

(*bolingeri* Scullen, 1972 = *bolingeriana* Krombein)

bolingeriana Krombein sw. U.S. to c. Mexico

*Cerceris bolingeri** Scullen, 1972:72, nec Scullen 1965a. [Female holotype, 40 mi. nw. Gomez Palacio, Durango, Mexico; USNM].

Cerceris bolingeriana Krombein, 1979:1730. New name for *Cerceris bolingeri* Scullen, 1972.

bothriophora Schletterer sw. U.S. to El Salvador

*Cerceris bothriophora** Schletterer, 1887:456. [Male lectotype, Mexico, designated by Ferguson (1984); Vienna].

*Cerceris geniculata** Cameron, 1890:113. [Female lectotype, Cuantla, Mexico, designated by Ferguson (1984); BMNH]. **New Synonymy.**

*Cerceris feralis** Cameron, 1890:113. [Male lectotype, Cuantla, Mexico, designated by Ferguson (1984); BMNH]. **Revised Synonymy.** Synonym of *C. geniculata* by Scullen (1962).

*Cerceris orestes** Banks, 1947:13. [Female lectotype, Patagonia, Arizona, designated by Ferguson (1983a); MCZ No. 27673]. **New Synonymy.**

Scullen (1972) left *bothriophora* as an unrecognized species, and he treated *geniculata* (= *feralis*) and *orestes* each as a subspecies of *C. compar* Cresson.

bradleyi Scullen s. Mexico to Nicaragua

*Cerceris bradleyi** Scullen, 1972:73. [Female holotype, La Calera (?), Nicaragua; USNM].

bridwelli Scullen sw. U.S., nw. Mexico

*Cerceris bridwelli** Scullen, 1965a:361. [Female holotype, Imperial County, California; USNM].

butleri Scullen sw. U.S., n. Mexico

*Cerceris butleri** Scullen, 1965a:363. [Female holotype, 30 mi. s. Stafford, Arizona; USNM].

cacaloapana Scullen se. Mexico

*Cerceris cacaloapana** Scullen, 1972:74. [Female holotype, Cacaloapan, Puebla, Mexico; UCD].

californica Cresson sw. Canada to c. Mexico

*Cerceris californica** Cresson, 1865b:128. [Male holotype, California; ANSP No. 1953].

?*Cerceris texensis* Saussure, 1867:89. [Female holotype, Texas; type not located]. **Revised Tentative Synonymy.**

*Cerceris ferruginior** Viereck and Cockerell, 1904:134. [Male holotype, Deming, New Mexico; ANSP No. 10378]. Synonymy by Scullen (1960).

*Cerceris garciana** Viereck and Cockerell, 1904:135. [Male holotype, Las Cruces, New Mexico; ANSP No. 10380]. Synonymy by Scullen (1960).

*Cerceris populorum** Viereck and Cockerell, 1904:135. [Male lectotype, Albuquerque, New Mexico, designated by Cresson (1928); ANSP No. 10385]. Synonymy by Scullen (1960).

*Cerceris argyrotricha** Rohwer, 1908:324. [Female holotype, Las Cruces, New Mexico; USNM]. Synonymy by Bohart and Grissell (1975).

*Cerceris cognata** Mickel, 1916:408. [Female holotype, Worland, Wyoming; NEB]. Synonymy by Scullen (1960).

*Cerceris denticularis** Banks, 1917:113. [Female lectotype, Umatilla, Oregon, designated by Ferguson (1983a); MCZ No. 10028]. Synonymy by Scullen (1960).

*Cerceris interjecta** Banks, 1919:84. [Male holotype, Lake Point, Utah; MCZ No. 13766]. Synonymy by Scullen (1960).

*Cerceris arno** Banks, 1947:19. [Female lectotype, Mountains near Claremont, California, designated by Ferguson (1983a); MCZ No. 23542]. Synonymy by Bohart and Grissell (1975), synonym of *argyrotricha* by Scullen (1972).

*Cerceris calodera** Banks, 1947:22. [Male holotype, Jacumba, California; MCZ No. 27622]. Synonymy by Scullen (1961).

*Cerceris illota** Banks, 1947:23. [Male lectotype, Tucson, Arizona, designated by Ferguson (1983a); MCZ No. 23541]. Synonymy by Scullen (1960).

C. texensis Saussure was described from a headless female which has not been located. Scullen (1961) synonymized it under *C. frontata* Say, but the original description does not support this placement. The wing length of 10 mm, red scutum, and mostly polished propodeal enclosure make it much more likely that Saussure had a specimen of *C. californica* Cresson, and I provisionally place it in the above synonymy rather than under *C. frontata*.

calochorti Rohwer sw. Canada, w. U.S.

*Cerceris calochorti** Rohwer, 1908:322. [Female holotype, Boulder, Colorado; USNM].

*Cerceris varians** Mickel, 1918:336. [Female holotype, Donner Lake, Placer County, California; NEB]. **New Synonymy.**

Scullen (1965a) separated *calochorti* and *varians* by their whitish and yellowish pale markings respectively. As in several other western species the pale markings vary from yellow to white in a south to north cline. The types of both *calochorti* and *varians* are the yellow form. I do not consider the whitish form worthy of subspecies recognition.

(*calodera* Banks = *californica* Cresson)

(*caridei* Holmberg = *dilatata* Spinola)

(*carolina* Banks = *compar* Cresson)

carrizonensis Banks sw. U.S.

*Cerceris carrizonensis** Banks, 1915:403. [Male holotype, Uvalde, Texas; MCZ No. 13772].

*Cerceris poculum** Scullen, 1965a:391. [Female holotype, 23 mi. ne. Douglas, Arizona; USNM]. **New Synonymy.**

Synonymy is by sex association. Scullen (1965a) left *carrizonensis* as an unrecognized species.

(*catamarcensis* Schrottky = *intricata* F. Smith)

(*catawba* Banks = *compar* Cresson)

cavagnaroi Scullen El Salvador to Brasil

*Cerceris cavagnaroi** Scullen, 1972:75. [Female holotype, Quezaltepeque, El Salvador; UCD].

cerverae Giner Mari Cuba

Cerceris cerverae Giner Mari, 1941:333. [Male holotype, Havana, Cuba; Madrid ?].

(*chilopsidis* Viereck and Cockerell = *acanthophila* Cockerell)

(*chinandegaensis* Cameron = *kennicottii* Cresson)

chiriquensis Cameron (Revised Status) sw. U.S. to Colombia

*Cerceris chiriquensis** Cameron, 1890:114. [Female holotype, Volcan de Chiriqui, Panama; BMNH].

Scullen (1972) treated this taxon as a subspecies of *insolita* Cresson, but it is morphologically distinct.

(*chisosensis* Scullen = *dilatata* Spinola)

(*chrysogastra* Schletterer = *simulans* Saussure)

(*chryssipe* Banks = *clypeata* Dahlbom)

(*cincta* Dahlbom = *fumipennis* Say)

(*cisandina* Brethes = *intricata* F. Smith)

(*citrina* Scullen = *finitima* Cresson)

(*cleomae* Rohwer = *crucis* Viereck and Cockerell)

(*clymene* Banks = *clypeata* Dahlbom)

clypeata Dahlbom se. Canada, e. U.S.

*Cerceris clypeata** Dahlbom, 1844:221. [Female lectotype, e. South Carolina, designated by Ferguson (1984); Lund].

*Cerceris imitator** Cresson, 1865b:125, nec F. Smith 1856. [Male lectotype, Illinois, designated by Cresson (1916); ANSP No. 1951]. Synonymy by Scullen (1960).

Cerceris imitatoria Schletterer, 1887:494. New name for *Cerceris imitator* Cresson.

*Cerceris chryssipe** Banks, 1912:18. [Female lectotype, Falls Church, Virginia, designated by Ferguson (1983a); MCZ No. 13791]. Synonymy by Scullen (1951).

*Cerceris clymene** Banks, 1912:20. [Female lectotype, Falls Church, Virginia, designated by Ferguson (1983a); MCZ No. 13789]. Synonymy by Scullen (1951).

*Cerceris zobeide** Brimley, 1929:194. [Male holotype, Raleigh, North Carolina; NCDA]. Synonymy by Scullen (1960).

*Cerceris zosma** Brimley, 1929:195. [Female holotype, Raleigh, North Carolina; NCDA]. Synonymy by Scullen (1960).

(*cochise* Scullen = *cochisi* Scullen)

cochisi Scullen sw. U.S., n. Mexico

*Cerceris cochisi** Scullen, 1965a:416. [Female holotype, Lordsburg to Silver City, New Mexico; USNM].

Cerceris cochise Scullen, 1972:42. *Lapsus*.

cockerelli Viereck sw. Canada, w. U.S.

*Cerceris cockerelli** Viereck, 1902:731. [Male lectotype, La Jolla, California, designated by Cresson (1928); ANSP No. 10037].

*Cerceris minax** Mickel, 1918:339. [Female holotype, Sacramento, California; NEB]. Synonymy by Ferguson (1983b).

(*cognata* Mickel = *californica* Cresson)

compacta Cresson e. and sw. U.S. to Costa Rica

*Cerceris compacta** Cresson, 1865b:127. [Female lectotype, Illinois, designated by Cresson (1916); ANSP No. 1940].

Cerceris huastecae Saussure, 1867:102. [Female, male syntypes, Tampico, Mexico; type specimens not located]. **New Synonymy.**

*Cerceris aureo-facialis*** Cameron, 1890:112. [Male holotype, Orizaba, Mexico; BMNH]. Synonymy by Scullen (1972).

*Cerceris solidaginis** Rohwer, 1908:323. [Male holotype, Las Cruces, New Mexico; USNM]. Synonymy by Scullen (1960).

*Cerceris belfragei** Banks, 1917:114. [Female lectotype, Texas, designated by Ferguson (1983a); MCZ No. 10029]. Synonymy by Scullen (1960).

*Cerceris costarica costarica** Scullen, 1972:44. [Female holotype, 3 mi. nw. Liberia, Costa Rica; USNM]. **New Synonymy.**

*Cerceris costarica mitla** Scullen, 1972:46. [Female holotype, Mitla, Oaxaca, Mexico; USNM]. **New Synonymy.**

C. huastecae is identifiable from the original description and figures. The color forms on which Scullen (1972) based his two subspecies of *costarica* are part of a clinal north to south variation, and both *huastecae* and *aureofacialis* are older names for the same color form.

compar Cresson e. and sw. U.S., n. Mexico

*Cerceris compar** Cresson, 1865b:126. [Male lectotype, Illinois, designated by Cresson (1916); ANSP No. 1949].

*Cerceris catawba** Banks, 1912:25. [Female lectotype, Southern Pines, North Carolina, designated by Ferguson (1983a); MCZ No. 13787]. Synonymy by Scullen (1960).

*Cerceris jucunda carolina** Banks, 1912:26. [Male lectotype, Southern Pines, North Carolina, designated by Ferguson (1983a); MCZ No. 13785]. Synonymy by Scullen (1951).

*Cerceris rufa** Scullen, 1965a:449, nec Taschenberg 1875. [Female holotype, South Miami, Florida; USNM]. **New Synonymy.**

*Cerceris compar albinota** Scullen, 1972:60. [Female holotype, 2 mi. ne. Portal, Cochise County, Arizona; USNM]. **New Synonymy.**

Cerceris rubrata Bohart and Menke, 1976:586. New name for *Cerceris rufa* Scullen.

C. compar varies clinally from yellow markings on a partially red background in Florida to whitish markings on a black background in southwestern U.S. and northern Mexico. The color variation is similar to that of several other species, and I do not consider these minor color forms worthy of subspecific names.

(*complanata* Mickel = *vanduzeei* Banks)

completa Banks California

*Cerceris completa** Banks, 1919:83. [Male holotype, Claremont, California; MCZ No. 13767].

*Cerceris grandis percna** Scullen, 1965a:415. [Female holotype, Moke-lumne Hill, Calaveras County, California; USNM]. Synonymy by Bohart and Grissell (1975).

conifrons Mickel w. U.S., n. Mexico

*Cerceris conifrons** Mickel, 1916:410. [Female holotype, Harrison, Nebraska; NEB].

(*contracta* Taschenberg = *dilatata* Spinola)

convergens Viereck and Cockerell w. U.S., n. Mexico

*Cerceris convergens** Viereck and Cockerell, 1904:136. [Female holotype, Alamogordo, New Mexico; ANSP No. 10376].

*Cerceris rinconis** Viereck and Cockerell, 1904:137. [Female holotype, Rincon, New Mexico; ANSP No. 10386]. Synonymy by Scullen (1942).

*Cerceris hesperina** Banks, 1917:115. [Female lectotype, Ainsworth, Washington, designated by Ferguson (1983a); MCZ No. 10031]. Synonymy by Scullen (1951).

*Cerceris pudorosa** Mickel, 1918:338. [Female holotype, Auburn, California; NEB]. Synonymy by Scullen (1942).

*Cerceris snowi** Banks, 1919:84. [Male lectotype, Tucson, Arizona, designated by Ferguson (1983a); MCZ No. 13764]. Synonymy by Scullen (1951).

cooperi Scullen s. Mexico to Costa Rica

*Cerceris cooperi** Scullen, 1972:43. [Female holotype, 6 mi. w. Turrialba, Costa Rica; USNM].

The holotype female bears the label "NEOTYPE—*Eucerceris cooperi* Scullen," an obvious lapsus in labelling.

cortezi Scullen (New Status) s. Mexico

*Cerceris insolita cortezi** Scullen, 1972:64. [Female holotype, Cuernavaca, Morelos, Mexico; USNM].

Although described as a subspecies, this taxon is a morphologically distinct species.

(*cosmiocephala* Cameron = *tolteca* Saussure)

(*costarica* Scullen = *compacta* Cresson)

crandalli Scullen sw. U.S., nw. Mexico

*Cerceris crandalli** Scullen, 1965a:372. [Female holotype, Tucson, Arizona; USNM].

(*crawfordi* Brimley = *arelate* Banks)

cribrosa Spinola s. Mexico to Brazil

*Cerceris cribrosa** Spinola, 1841:119. [Female lectotype, Cayenne, French Guiana, designated by Ferguson (1984); Torino].

*Cerceris subpetiolata** Saussure, 1867:95. [Female lectotype, Cordova, Mexico, designated by Ferguson (1984); Vienna]. Synonymy by Scullen (1961).

*Cerceris pullatus** F. Smith, 1873:105. [Female lectotype, Sao Paulo, Brasil, designated by Ferguson (1984); BMNH]. Synonymy by Scullen (1962).

Cerceris albimana Taschenberg, 1875:395. [Female lectotype, Venezuela, designated by Scullen (1962); Halle]. Synonymy by Scullen (1962).

crotonella Viereck and Cockerell sw. U.S., n. Mexico

*Cerceris crotonella** Viereck and Cockerell 1904:139. [Female holotype, Las Cruces, New Mexico; ANSP].

crucis Viereck and Cockerell (New Status) s. Canada to n. Mexico

Cerceris rufinoda var. *crucis** Viereck and Cockerell, 1904:139. [Female lectotype, Las Cruces, New Mexico, designated by Ferguson (1984); ANSP].

*Cerceris cleomae** Rohwer, 1908:325. [Male holotype, Denver, Colorado; USNM]. **New Synonymy.**

*Cerceris finitima nigroris** Banks, 1912:27. [Male lectotype, Falls Church, Virginia, designated by Ferguson (1983a); MCZ No. 13786]. **Revised Synonymy.** Synonym of *C. finitima* Cresson by Scullen (1965a).

Viereck and Cockerell (1904) and subsequent authors have used the name *C. rufinoda* for this species. However, the male holotype of *C. rufinoda* Cresson is a specimen of the species which has gone under the name *C. argia* Mickel. *C. crucis* is the oldest available name for the *rufinoda* of authors. *C. cleomae* and *C. nigroris* are both males with a black tergum I. This color form occurs sporadically over most of the range of the species. Scullen (1965a) had left *cleomae* as an unrecognized species.

cubensis Cresson (Revised Status) Cuba; Jamaica

*Cerceris zonata** Cresson, 1865a:156, nec Say 1823. [Female lectotype, Cuba, designated by Cresson (1916); ANSP No. 1958].

Cerceris cubensis Cresson, 1865b:123. Created in synonymy as a new name for *C. zonata* Cresson.

Cresson (1865b) proposed *C. cubensis* as a new name for *C. zonata* Cresson because of the similarity of the latter name to *C. zonalis* (!) F. Smith 1856. The name *cubensis* was created in synonymy since *zonalis* is not a homonym of *zonata*. However, when *Philanthus zonatus* Say was

transferred by Schletterer (1887) from *Eucerceris* to *Cerceris*, *C. zonata* Cresson became a junior secondary homonym of *C. zonata* (Say). Dalla Torre (1890, 1897) rejected *zonata* Cresson and used *cubensis* Cresson as the next available name. *C. zonata* Cresson was thereby permanently rejected, and *cubensis* is available even though it was created in synonymy.

cuernavaca Scullen s. Mexico

*Cerceris cuernavaca** Scullen, 1972:46. [Female holotype, Cuernavaca, Morelos, Mexico; USNM].

(*curvicornis* Cameron = *bicornuta* Guerin)

(*dakotensis* Banks = *vicina* Cresson)

(*denticularis* Banks = *californica* Cresson)

dentifrons Cresson se. Canada, e. U.S.

*Cerceris dentifrons** Cresson, 1865b:124. [Female lectotype, Illinois, designated by Cresson (1916); ANSP No. 1942].

deserta Say se. Canada, ne. U.S.

*Cerceris deserta** Say, 1824:343. [Male neotype, South Dakota, designated by Scullen (1965a); MCZ No. 31113].

*Cerceris fulvipes** Cresson, 1865b:126, nec Eversmann 1849. [Female lectotype, Delaware, designated by Cresson (1916); ANSP No. 1941]. Synonymy by Scullen (1942).

Cerceris fulvipediculata Schletterer, 1887:492. New name for *Cerceris fulvipes* Cresson.

dilatata Spinola sw. U.S. to Argentina

*Cerceris dilatata** Spinola, 1841:118. [Female lectotype, Cayenne, French Guiana, designated by Ferguson (1984); Torino].

*Cerceris atriceps** F. Smith, 1856:458. [Female holotype, Para, Brasil; BMNH]. **New Synonymy.**

*Cerceris maximiliani** Saussure, 1867:94. [Female lectotype, Mexico, designated by Scullen (1961); Geneva]. Synonymy by Scullen (1961).

Cerceris contracta Taschenberg, 1875:396. [Female lectotype, Brasil, designated by Scullen (1962); Halle]. Synonymy by Scullen (1962).

Cerceris caridei Holmberg, 1903:478. [Female holotype, Territorium Pampa Centralis, Argentina; MACN]. Synonymy by Fritz (1971).

Cerceris vigili Brethes, 1910:270. [Male lectotype, Alta Gracia, Cordoba, Argentina, designated by Fritz (1970); MACN]. Synonymy by Fritz (1971).

Cerceris divisa Brethes, 1910:270. [Female holotype, Las Mercedes, Chaco, Argentina; MACN]. Synonymy by Fritz (1971).

*Cerceris olymponis** Strand, 1910:140. [Female holotype, Asuncion, Paraguay; Berlin]. Synonymy by Scullen (1962).

*Cerceris semiatra** Banks, 1947:25. [Male holotype, Patagonia, Arizona; MCZ No. 27620]. Synonymy by Scullen (1961).

*Cerceris dilatata chisosensis** Scullen, 1965a:409. [Female holotype, Chi-

sos Mountains, Big Bend National Park, Texas; USNM]. **New Synonymy.**

The subspecies *chisosensis* was based on specimens with a partially red background color on the propodeum and tergum I. These forms occur with normally colored specimens in the southwestern U.S. and northern Mexico.

A dark form in eastern Brasil and Argentina having a pale band on tergum III with the markings on the posterior terga absent or evanescent may be worthy of subspecies status. *C. atriceps* F. Smith is the oldest name applicable to this form, but I have not seen sufficient material to recognize a subspecies at this time.

(*dissita* Holmberg = *intricata* F. Smith)

(*divisa* Brethes = *dilatata* Spinola)

dreisbachi Scullen s. Mexico

*Cerceris dreisbachi** Scullen, 1972:77. [Female holotype, Cuernavaca, Morelos, Mexico; USNM].

(*dufourii* Guerin = *bicornuta* Guerin)

(*duisi* Scullen = *flavotrochanterica* Rohwer)

durango Scullen c. Mexico

*Cerceris durango** Scullen, 1972:78. [Female holotype, 15 mi. n. Durango, Durango, Mexico; USNM].

(*eburnea* Scullen = *vanduzeei* Banks)

echo Mickel s. Canada to n. Mexico

*Cerceris echo** Mickel, 1916:412. [Female holotype, Monroe Canyon, Sioux County, Nebraska; NEB].

*Cerceris echo atrata** Scullen, 1965a:377. [Female holotype, Camden County, New Jersey; ANSP No. 5039]. **New Synonymy.**

The subspecies *atrata* was based on the color form with a black tergum I. This color form occurs sporadically throughout the range of the species, and I do not consider it worthy of subspecies recognition.

(*elegans* F. Smith = *blakei* Cresson)

(*elegantissima* Schletterer = *blakei* Cresson)

(*elephantinops* Holmberg = *intricata* F. Smith)

(*emmiltosa* Scullen = *rufopicta* F. Smith)

(*englehardti* Banks = *mimica* Cresson)

(*erigoni* Viereck and Cockerell = *kennicottii* Cresson)

erythropoda Cameron s. Mexico

*Cerceris erythropoda** Cameron, 1890:126. [Female holotype, Cordova, Mexico; BMNH].

(*esau* Schletterer = *mimica* Cresson)

(*eurymele* Banks = *sextoides* Banks)

(*eustylicida* Williams = *nigra* Ashmead)

evansi Scullen c. Mexico

- Cerceris evansi** Scullen, 1972:80. [Female holotype, 3 mi. nw. Cuernavaca, Morelos, Mexico; USNM].
(*exsecta* F. Smith = *imperialis* Saussure)
- farri** Scullen Jamaica
*Cerceris farri** Scullen, 1970:199. [Female holotype, 3.5 mi. sw. Mandeville, Manchester, Jamaica; USNM].
(*fasciola* Cresson = *occipitomaculata* Packard)
- femurrubrum** Viereck and Cockerell sw. U.S. to c. Mexico
*Cerceris femur-rubrum** Viereck and Cockerell, 1904:135. [Male lectotype, Albuquerque, New Mexico, designated by Cresson (1928); ANSP No. 10040].
*Cerceris thione** Banks, 1947:18. [Male lectotype, Colton, California, designated by Ferguson (1983a); MCZ No. 23543]. Synonymy by Scullen (1951).
*Cerceris athene** Banks, 1947:20. [Female holotype, Claremont, California; MCZ No. 23537]. Synonymy by Bohart and Grissell (1975).
Cerceris femurrubra [sic] *rossi** Scullen, 1972:56. [Female holotype, Las Animas, Sierra Laguna, Baja California Sur, Mexico; CAS]. Synonymy by Bohart in Bohart and Menke (1976).
(*feralis* Cameron = *bothriophora* Schletterer)
(*ferruginior* Viereck and Cockerell = *californica* Cresson).
- festiva** Cresson Cuba
Cerceris festiva Cresson, 1865a:156. [Male holotype, Cuba; Havana ?].
*Cerceris gratiosa** Schletterer, 1887:460. [Male holotype, Cuba; Vienna].
Synonymy by Scullen in Alayo (1968).
(*fidelis* Viereck and Cockerell = *bicornuta* Guerin)
- finitima** Cresson s. Canada to n. Mexico
*Cerceris finitima** Cresson, 1865b:122. [Female holotype, Illinois; ANSP No. 1948].
*Cerceris finitima citrina** Scullen, 1965a:380. [Female holotype, Riverside, California; CAS]. Synonymy by Bohart and Grissell (1975).
(*firma* Cresson = *verticalis* F. Smith)
- flavida** Cameron s. Mexico
*Cerceris flavida** Cameron, 1890:116. [Female lectotype, Cordova, Mexico, designated by Ferguson (1984); BMNH].
*Cerceris atacomulca** Scullen, 1972:68. [Female holotype, Atacomulca, Mexico, Mexico; USNM]. **New Synonymy.**
Scullen (1972) left *C. flavida* as an unrecognized species, but the lectotype is conspecific with *C. atacomulca*.
- flavocostalis** Cresson Cuba
Cerceris flavocostalis Cresson, 1865a:153. [Female, male syntypes, Cuba; Havana ?].
- flavofasciata** H. Smith e. U.S.

*Cerceris flavofasciata** H. Smith, 1908:364. [Female holotype, Lincoln, Nebraska; NEB].

*Cerceris floridensis** Banks, 1915:403. [Male holotype, Gulfport, Florida; MCZ No. 13765]. **New Synonymy.**

*Cerceris natalenus** Brimley, 1927:238. [Female holotype, La Grange, North Carolina; NCDA]. Synonymy by Scullen (1951).

Scullen (1965a) recognized *C. floridensis* as a red marked subspecies. The color variation from north to south is clinal and homeochromic with *C. rufopicta* F. Smith. The black and yellow northern form passes through a black, yellow and red phase to a black and red form in southern Florida.

(*flavomaculata* Cameron = *otomia* Saussure)

flavotrochanterica Rohwer c. Mexico

*Cerceris flavotrochanterica** Rohwer, 1912:471. [Male holotype, Federal District, Mexico; USNM].

*Cerceris duisi** Scullen, 1972:47. [Female holotype, 10 mi. sw. Mendoza, Veracruz, Mexico; USNM]. **New Synonymy.**

Synonymy is by sex association.

(*floridensis* Banks = *flavofasciata* H. Smith)

fortin Scullen s. Mexico

*Cerceris fortin** Scullen, 1972:47. [Female holotype, Fortin de las Flores, Veracruz, Mexico; CAS].

I have not identified the male of this species.

frontata Say sw. U.S., n. Mexico

*Cerceris frontata** Say, 1823:80. [Female neotype, 19 mi. e. Lordsburg, New Mexico, designated by Scullen (1965a); USNM].

*Cerceris occidentalis** Saussure, 1867:100. [Female lectotype, Texas, designated by Scullen (1961); Geneva]. Synonymy by Scullen (1961).

*Cerceris raii** Rohwer, 1920:230. [Female holotype, St. Louis, Missouri; USNM]. Synonymy by Bohart and Grissell (1975).

(*fugatrix* Mickel = *sexta* Say)

(*fulvipediculata* Schletterer = *deserta* Say)

(*fulvipes* Cresson = *deserta* Say)

fumipennis Say se. Canada, e. U.S.

*Cerceris fumipennis** Say, 1837:381. [Male neotype, 3 mi. w. Kaskaskia River, Boulder, Illinois, designated by Scullen (1965a); USNM].

*Cerceris cincta** Dahlbom, 1844:204. [Male holotype (headless), North America; Lund]. Synonymy by Cresson (1865b).

Cerceris uncinata Taschenberg, 1875:397. [Female holotype, Tennessee; Halle]. Synonymy by Dalla Torre (1897).

gandarai Rohwer c. Mexico

*Cerceris gardarai** Rohwer, 1912:470. [Male holotype, Federal District, Mexico; USNM].

*Cerceris micheneri** Scullen, 1972:86. [Female holotype, Matachic, Chihuahua, Mexico; AMNH]. Synonymy by Ferguson (1983b).

(*gandari* Scullen = *rohweri* Ferguson)

(*ganderi* Scullen = *rohweri* Ferguson)

(*garciana* Viereck and Cockerell = *californica* Cresson)

(*geniculata* Cameron = *bothriophora* Schletterer)

(*gnara* Cresson = *verticalis* F. Smith)

gnarina Banks (Revised Status) sc. Canada to sc. U.S.

*Cerceris gnarina** Banks, 1913a:237. [Female lectotype, Vinita, Oklahoma, designated by Ferguson (1983a); AMNH].

*Cerceris posticata** Banks, 1916:64. [Male holotype, Jemez Mountains, New Mexico; MCZ No. 13771]. **New Synonymy.**

Synonymy is by sex association. *C. gnarina* is a valid species and not a subspecies of *C. clypeata* as proposed by Scullen (1965a).

grandis Banks sw. U.S., nw. Mexico

*Cerceris grandis** Banks, 1913b:423. [Female holotype, Fort Yuma, Arizona; AMNH].

(*graphica* F. Smith = *intricata* F. Smith)

(*gratiosa* Schletterer = *festiva* Cresson)

grisselli Ferguson California

*Cerceris grisselli** Ferguson, 1983b:236. [Female holotype, Tanbark Flat, Los Angeles County, California; UCD].

See Ferguson (1983b) for a discussion of the synonymy of this species.

halone Banks se. Canada, e. U.S.

*Cerceris halone** Banks, 1912:24. [Female holotype, Falls Church, Virginia; MCZ No. 13777].

*Cerceris stigmosalis** Banks, 1916:64. [Male holotype, Fargo, North Dakota; MCZ No. 13778]. **New Synonymy.**

*Cerceris architis** Mickel, 1916:409. [Female holotype, South Bend, Nebraska; NEB]. Synonymy by Scullen (1960).

*Cerceris salome** Banks, 1923:21. [Female lectotype, Jones Creek, Lee County, Virginia, designated by Ferguson (1983a); MCZ No. 14705]. Synonymy by Scullen (1951).

*Cerceris shermani** Brimley, 1928:200. [Female holotype, Raleigh, North Carolina; NCDA]. Synonymy by Scullen (1951).

The holotype male of *C. stigmosalis* Banks was misidentified by Scullen (1965a, 1972) as he applied the name to the whitish form of *Cerceris sexta* Say.

hatuey Alayo Cuba

Cerceris hatuey Alayo, 1968:14. [Female, male syntypes, Cuba; Havana ?].

(*hebes* Cameron = *intricata* F. Smith)

(*hesperina* Banks = *convergens* Viereck and Cockerell)

hidalgo Scullen (New Status) c. Mexico

*Cerceris calochorti hidalgo** Scullen, 1972:75. [Female holotype, 14 mi. ne. Durango, Mexico; USNM].

Although described as a subspecies, the holotype female of *hidalgo* represents a distinct species. At least three species were included by Scullen in his determinations under the name *C. calochorti hidalgo*.

huachuca Banks (Revised Status) sw. U.S. to El Salvador

Cerceris (Apiratrix) [sic] *huachuca** Banks, 1947:29. [Male holotype (thorax and gaster only), Patagonia, Arizona; MCZ No. 27636].

C. huachuca was incorrectly synonymized under *C. acanthophila* Cockerell by Scullen (1942) and subsequent authors. It is a distinct species closely allied to *C. finitima* Cresson. Many of Scullen's determinations under the name *C. finitima vierecki* were this species.

(*huastecae* Saussure = *compacta* Cresson)

hurdi Scullen sw. U.S. to Nicaragua

*Cerceris hurdi** Scullen, 1972:48. [Female holotype, Ahuacatlan, Nayarit, Mexico; CAS].

(*idahoensis* Scullen = *aequalis* Provancher)

(*illota* Banks = *californica* Cresson)

(*imitator* Cresson = *clypeata* Dahlbom)

(*imitatoria* Schletterer = *clypeata* Dahlbom)

imperialis Saussure c. Mexico to Ecuador

*Cerceris imperialis** Saussure, 1867:98. [Female lectotype, Mexico, designated by Scullen (1961); Geneva].

*Cerceris exsecta** F. Smith, 1873:410. [Female lectotype, Mexico, designated by Ferguson (1984); BMNH]. Synonymy by Scullen (1961).

*Cerceris pilosa*** Cameron, 1890:128. [Male holotype, Guatemala; BMNH]. Synonymy by Scullen (1961).

insolita Cresson e. and sw. U.S., e. Mexico

*Cerceris insolita** Cresson, 1865b:129. [Male holotype, Illinois; ANSP No. 1954].

*Cerceris intractibilis** Mickel, 1916:411. [Female holotype, Child's Point, Nebraska; NEB]. Synonymy by Scullen (1962).

*Cerceris insolita albida** Scullen, 1965a:447. [Female holotype, Las Cruces, New Mexico; USNM]. **New Synonymy.**

*Cerceris insolita atrafemori** Scullen, 1965a:448. [Female holotype, Phoenix, Arizona; USNM]. **New Synonymy.**

Scullen (1965a) based his subspecies *albida* and *atrafemori* on rather minor color differences. The pale markings in this species increase clinally from east to west as in several other species.

(*interjecta* Banks = *californica* Cresson)

(*intractibilis* Mickel = *insolita* Cresson)

intricata intricata F. Smith Venezuela to Argentina

*Cerceris intricata** F. Smith, 1856:459. [Male lectotype, Santarem, Brasil, designated by Ferguson (1984); BMNH].

*Cerceris simplex** F. Smith, 1856:462. [Female lectotype, Santarem, Brasil, designated by Ferguson (1984); BMNH]. Synonymy by Fritz (1971).

*Cerceris vulpina** F. Smith, 1856:463. [Male lectotype, Brasil, designated by Ferguson (1984); BMNH]. Synonymy by Fritz (1971).

Cerceris larvata Taschenberg, 1875:391. [Male holotype, Mendoza, Argentina; Halle]. Synonymy by Fritz (1971).

*Cerceris affumata** Schletterer, 1887:455. [Female holotype, Rio de Janeiro, Brasil; Vienna]. Synonymy by Fritz (1971). Synonym of *C. simplex* by Scullen (1965b).

Cerceris melanogaster Holmberg, 1903:481. [Female holotype, Territorium Pampa Centralis, Argentina; MNBA]. Synonymy by Fritz (1971). Synonym of *C. larvata* by Fritz (1962).

Cerceris elephantinops Holmberg, 1903:485. [Male holotype, Territorium Pampa Centralis, Argentina; location of type unknown]. Synonymy by Fritz (1971). Synonym of *C. larvata* by Scullen (1965b).

Cerceris elephantinops var. *dissita* Holmberg, 1903:485. [Male holotype, Formosa, Argentina; location of type unknown]. Synonymy by Fritz (1971). Synonym of *C. larvata* by Fritz (1962).

Cerceris catamarcensis Schrottky, 1909:246. [Female holotype?, Catamarca, Argentina; location of type unknown]. Synonymy by Fritz (1971).

Cerceris cisandina Brethes, 1913:122. [Female holotype, Mendoza, Argentina; location of type unknown]. Synonymy by Fritz (1971).

intricata graphica F. Smith (Revised Status) sw. U.S. to Peru

*Cerceris graphica** F. Smith, 1873:410. [Female holotype, Mexico; BMNH].

*Cerceris hebes** Cameron, 1890:124. [Male holotype, (thorax and gaster only), Chilpancingo, Guerrero, Mexico; BMNH]. Synonymy by Bohart and Grissell (1975).

*Cerceris macrosticta** Viereck and Cockerell, 1904:133. [Male holotype New Mexico; ANSP No. 10381]. Synonymy by Bohart and Grissell (1975).

*Cerceris ampla** Banks, 1912:16. [Female lectotype, designated by Ferguson (1984); MCZ No. 13769]. Synonym of *C. macrosticta* by Scullen (1942).

This wide ranging species occurs from the southwestern U.S. to Argentina. Color varies from a highly maculated pale form in the U.S. and Mexico to an almost completely melanic form in southern South America. Scullen (1965b) divided it into four subspecies under the specific name *C. simplex*. His subspecies were (1) *simplex simplex* (= *affumata*) for the

most melanic form from Brasil; (2) *simplex larvata* (=elephantinops) from Brasil and Argentina; (3) *simplex graphica* from Mexico to Peru; and (4) *simplex macrosticta* (=ampla) from northern Mexico and the southwestern U.S.

Fritz (1971) separated *intricata* from *macrosticta* as distinct species on the basis of characters in the males, but the characters used are inconsistent when large number of specimens are examined. The apicolateral corners of the male pygidium are usually bluntly rounded in the north and subspinose in Argentina. This variation is clinal with specimens from Venezuela, Colombia and Peru showing an intermediate condition.

I recognize two subspecies. The nominate subspecies occurs from Venezuela to Argentina and is characterized by having the pale bands on the terga reduced to narrow bands or absent. The subspecies *graphica* occurs from the southwestern U.S. to Colombia and Peru with the pale tergal bands wide, sometimes completely covering the terga.

irene Banks sc. U.S.

*Cerceris irene** Banks, 1912:26. [Female holotype, Fedor, Lee County, Texas; MCZ No. 13781].

(*iresinides* Rohwer = *kennicottii* Cresson)

(*irwini* Scullen = *mexicana* Saussure)

isolde Banks (Revised Status) sw. U.S., nw. Mexico

*Cerceris isolde** Banks, 1947:24. [Male holotype, Palmerlee, Arizona; MCZ No. 23540].

*Cerceris sandiegensis** Scullen, 1965a:432. [Female holotype, 2 mi. e. Anza, Riverside County, California; CAS]. **New Synonymy.**

Scullen (1960, 1965a) misidentified *C. isolde* and incorrectly synonymized it under *C. californica* Cresson.

(*josei* Scullen = *mexicana* Saussure)

jucunda Cresson (Revised Status) e. U.S.

*Cerceris jucunda** Cresson, 1872:231. [Male holotype, Texas; USNM].

*Cerceris zelica** Banks, 1912:23. [Female lectotype, Fedor, Texas, designated by Ferguson (1983a); MCZ No. 13773]. **New Synonymy.**

Scullen (1951) incorrectly synonymized *C. jucunda* under *C. compar* Cresson. Synonymy is by sex association.

kennicottii kennicottii Cresson se. Canada to s. Mexico

*Cerceris kennicottii** Cresson, 1865b:128. [Male holotype, Louisiana; ANSP No. 1952].

*Cerceris montivaga** Cameron, 1890:119. [Female holotype, Chilpancingo, Guerrero, Mexico; BMNH]. **Revised Synonymy.** Synonym of *C. kennicottii zapoteca* Saussure by Scullen (1972).

*Cerceris eriogoni** Viereck and Cockerell, 1904:139. [Male holotype, Dripping Spring, Organ Mountains, New Mexico; ANSP No. 10377]. Synonymy by Scullen (1965a).

*Cerceris kennicottii beali** Scullen, 1965a:386. [Female holotype, Scottsdale, Arizona; USNM]. Synonymy by Bohart and Grissell (1975).

kennicottii chinandegaensis Cameron (Revised Status) Guatemala to Panama

*Cerceris chinandegaensis** Cameron, 1904:66. [Male lectotype, Chinandega, Nicaragua, designated by Ferguson (1984); BMNH].

*Cerceris iresinides** Rohwer, 1914:522. [Male holotype, Gualan, Guatemala; USNM]. **Revised Synonymy.** Synonym of *C. kennicottii bakeri* by Scullen (1972).

This species varies from yellowish pale maculations in the northern and eastern U.S. to whitish pale markings in most of Mexico and parts of the southwestern U.S. Scullen (1965a) described *beali* as a subspecies for these whitish forms and later (1972) incorrectly used *zapoteca* Saussure as the subspecies name with *beali* as a junior synonym. *C. zapoteca* Saussure is a distinct species and not a subspecies of *kennicottii*.

From Guatemala to Costa Rica it has an almost completely yellow propodeum and tergum I, and apparently mimics *Polybia occidentalis bohemani* Holmgren in this area as do some other species of *Cerceris*. Scullen (1972) applied the name *bakeri* to this color form, but *bakeri* is a distinct species occurring in the same color form in the same area. Scullen (1972) applied the name *smithiana* as a subspecies to an intermediate color form, but *smithiana* is the female and a junior synonym of *zapoteca* Saussure. I here recognize the form with the mostly or entirely yellow propodeum as a subspecies, but it must take the name *kennicottii chinandegaensis* Cameron. See also discussions under the names *bakeri* and *zapoteca*.

krombeini Scullen sw. U.S.; nw. Mexico

*Cerceris krombeini** Scullen, 1965a:388. [Female holotype, Continental, Arizona; USNM].

krugi Dewitz Puerto Rico

*Cerceris krugi** Dewitz, 1881:200. [Female lectotype, Puerto Rico, designated by Ferguson (1984); Berlin].

*Cerceris margaratella** Rohwer, 1915:248. [Male holotype, Puerto Rico; USNM]. **New Synonymy.**

Synonymy is by sex association. Scullen recognized this synonymy in determinations.

laevigata F. Smith Dominican Republic

*Cerceris laevigata** F. Smith, 1856:465. [Female lectotype, Santo Domingo, designated by Ferguson (1984); BMNH].

Cerceris levigata Dalla Torre, 1897:466. Emendation.

(*larvata* Taschenberg = *intricata* F. Smith)

(*levigata* Dalla Torre = *laevigata* F. Smith)

lutzi Scullen Panama

*Cerceris lutzi** Scullen, 1972:85. [Female holotype, El Volcan Chiriqui, Panama; AMNH].

(*macrosticta* Viereck and Cockerell = *intricata* F. Smith)

macswaini Scullen sw. U.S.

*Cerceris macswaini** Scullen, 1965a:485. [Female holotype, Imperial County, California; USNM].

mandibularis Patton e. U.S.

*Cerceris mandibularis** Patton, 1880:403. [Female neotype, Glenside, Pennsylvania, designated by Scullen (1965a); USNM].

(*margaretella* Rohwer = *krugi* Dewitz)

(*marginata* Cameron = *marginula* Dalla Torre)

marginula Dalla Torre s. Mexico to Panama

*Cerceris marginata*** Cameron, 1890:117, nec F. Smith 1856. [Female holotype, Volcan de Irazu, Costa Rica; BMNH].

Cerceris marginula Dalla Torre, 1897:467. New name for *Cerceris marginata* Cameron.

(*maximiliani* Saussure = *dilatata* Spinola)

(*melanogaster* Holmberg = *intricata* F. Smith)

melanthe Banks sw. U.S., n. Mexico

*Cerceris melanthe** Banks, 1947:21. [Female holotype, Apache Canyon, Santa Catalina Mountains, Arizona; MCZ No. 23539].

mexicana mexicana Saussure s. Mexico to El Salvador

Cerceris mexicana Saussure, 1867:101. [Female, male syntypes, "Agro Mexicano calido"; types not located].

*Cerceris veracruz veracruz** Scullen, 1972:53. [Female holotype, 1 mi. e. Cordoba, Veracruz, Mexico; CAS]. **New Synonymy.**

*Cerceris veracruz josei** Scullen, 1972:53. [Female holotype, Quezaltepeque, El Salvador; UCD]. **New Synonymy.**

mexicana irwini Scullen (Revised Status) Nicaragua, Costa Rica

*Cerceris irwini** Scullen, 1972:49. [Female holotype, 7 mi. s.e. Liberia, Costa Rica; USNM].

C. mexicana is identifiable from Saussure's description and figures. *C. irwini* is conspecific with *mexicana*, but represents another mimic of *Polybia occidentalis bohemani* Holmgren, and I recognize it here as a subspecies. The subspecies *josei* is somewhat intermediate between the nominate subspecies and *irwini*, but I regard it as a minor color variant.

(*micheneri* Scullen = *gandarai* Rohwer)

militaris Dahlbom Costa Rica to Brasil

Cerceris militaris Dahlbom, 1844:224. [Female holotype, erroneously reported from "Cap Bonae Spei"; Lund].

Cerceris rufo-nigra Taschenberg, 1875:399. [Female lectotype, here designated, Rio de Janeiro, Brasil; Halle]. Synonymy by Empey (1980).

*Cerceris rufonigra turrialba** Scullen, 1972:51. [Female holotype, Turrialba, Costa Rica; USNM]. **New Synonymy.**

The subspecies *turrialba* proposed by Scullen (1972) has the same pattern of maculations as the nominate form; the individual pale marks are simply larger. Empey (1980) studied the types of both *militaris* and *rufonigra* and established their identity. Empey (personal communication) states that the type specimen bears a lectotype label affixed by Scullen, but neither he nor I have found any published reference to the designation of a lectotype. The type specimen is probably a holotype since Taschenberg (1875) stated the number of specimens at hand when he had more than one. In order to avoid any future confusion, the above specimen, labelled as described by Empey (1980) and bearing the lectotype label affixed by Scullen, is here designated lectotype despite the fact that such designation may be redundant.

(*miltosa* Scullen = *rufopicta* F. Smith)

mimica Cresson sw. U.S. to c. Mexico

*Cerceris mimica** Cresson, 1872:228. [Female lectotype, Texas, designated by Cresson (1916); ANSP No. 1943].

*Cerceris esau** Schletterer, 1887:458. [Female lectotype, Mexico, designated by Scullen (1961); Vienna]. Synonymy by Scullen (1961).

Cerceris minima Schletterer, 1887:497. *Lapsus.*

*Cerceris englehardti** Banks, 1947:12. [Male holotype, St. John, Arizona; MCZ No. 27638]. Synonymy by Scullen (1951).

(*minima* Schletterer = *mimica* Cresson)

(*minax* Mickel = *cockerelli* Viereck)

(*mitla* Scullen = *compacta* Cresson)

montealban Scullen c. Mexico

*Cerceris montealban** Scullen, 1972:51. [Female holotype, Oaxaca, Oaxaca, Mexico; CAS].

montezuma Cameron c. Mexico

*Cerceris montezuma** Cameron, 1890:108. [Female lectotype, Mexico, designated by Ferguson (1984); BMNH].

(*montivaga* Cameron = *kennicottii* Cresson)

(*morata* Cresson = *tepaneca* Saussure)

morelos Scullen (New Status) s. Mexico

*Cerceris finitima morelos** Scullen, 1972:25. [Female holotype, 14 mi. s. Cuernavaca, Mexico; USNM].

Although described as a subspecies, I regard this taxon as a distinct species closely allied to *C. finitima*. It was synonymized under *C. finitima* Cresson by Bohart in Bohart and Menke (1976).

(*munda* Mickel = *nigrescens* F. Smith)

(*nasica* Viereck and Cockerell = *tepaneca* Saussure)

(*natalena* Brimley = *flavofasciata* H. Smith)

neahminax Scullen sw. U.S.

*Cerceris neahminax** Scullen, 1965a:390. [Female holotype, Santa Fe, New Mexico; CAS].

nebrascensis H. Smith nc. U.S.

*Cerceris nebrascensis** H. Smith, 1908:368. [Female holotype, Glen, Sioux County, Nebraska; NEB].

nigra Ashmead St. Vincent, British Guiana, Panama

*Cerceris nigra** Ashmead, 1900:227. [Female lectotype, St. Vincent, British West Indies, designated by Ferguson (1984); USNM].

*Cerceris eustylicida** Williams, 1928:169. [Female holotype, Blairmont, Berbice County, British Guiana; BPBM]. **New Synonymy.**

The types of the above two species and a female from Panama [UCD] present three slightly different shapes of the longitudinal ridge on the apical portion of the clypeal midsection. They are inseparable in all other respects, and I conclude that they are all conspecific with minor interpopulation variations.

nigrescens F. Smith Alaska, Canada, n. and w. U.S.

*Cerceris nigrescens*** F. Smith, 1856:466. [Female holotype, Nova Scotia; BMNH].

*Cerceris munda** Mickel, 1918:337. [Female holotype, Sacramento, California; NEB]. Synonymy by Bohart and Grissell (1975).

*Cerceris abbreviata** Banks, 1919:84. [Male lectotype, Nelson's, Yakima River, Washington, designated by Ferguson (1983a); MCZ No. 13794]. Synonymy by Scullen (1951).

(*nigritula* Banks = *arelate* Banks)

(*nigroris* Banks = *crucis* Viereck and Cockerell)

(*nitida* Banks = *nitidoides* Ferguson)

nitidoides Ferguson (**New Name**) se. Canada, e. U.S.

*Cerceris nitida** Banks, 1913b:424, nec Wesmael 1852. [Female lectotype, Valley of Black Mountains, North Carolina, designated by Ferguson (1983a); AMNH].

Scullen (1976) incorrectly synonymized this taxon under *C. melanthe* Banks as the two are distinct species.

(*novomexicana* Viereck and Cockerell = *occipitomaculata* Packard)

oaxaca Scullen s. Mexico

*Cerceris oaxaca** Scullen, 1972:90. [Female holotype, 12 mi. se. Oaxaca, Mexico; USNM].

The allotype male and paratype males are not conspecific, but represent dark specimens of *C. truncata* Cameron.

obregon Scullen nw. Mexico

*Cerceris obregon** Scullen, 1972:34. [Female holotype, 38 mi. nw. Obregon, Sonora, Mexico; USNM].

obsoleta Cameron s. Mexico to Colombia

*Cerceris obsoleta** Cameron, 1890:118. [Female lectotype, Teapa, Tabasco, Mexico, designated by Ferguson (1984); BMNH].

(*occidentalis* Saussure = *frontata* Say)

occipitomaculata Packard se. Canada, e. U.S.

*Cerceris occipitomaculata** Packard, 1866:62. [Male neotype, Hunt County, Texas, designated by Scullen (1965a); USNM].

*Cerceris fasciola** Cresson, 1872:230. [Male holotype, Comal County, Texas; ANSP No. 1950]. Synonymy by Scullen (1965a).

*Cerceris novomexicana** Viereck and Cockerell, 1904:137. [Female holotype, Johnson Park, New Mexico; ANSP No. 10383]. Synonymy by Scullen (1965a).

(*olympionis* Strand = *dilatata* Spinola)

(*orestes* Banks = *bothriophora* Schletterer)

(*orphne* Banks = *sexta* Say)

otomia Saussure (Revised Status) s. Mexico to Colombia

*Cerceris otomia** Saussure, 1867:99. [Female lectotype, Mexico, designated by Ferguson (1984); Vienna].

*Cerceris flavo-maculata** Cameron, 1890:115. [Female lectotype, Rio Suisio, Costa Rica, designated by Ferguson (1984); BMNH]. **New Synonymy.**

Cerceris otomita Dalla Torre, 1897:469. *Lapsus.*

The apical teeth of the clypeal margin of *C. flavomaculata* are somewhat larger than in *C. otomia*, but I have seen specimens intermediate between the two and have concluded that they are conspecific.

(*otomita* Dalla Torre = *otomia* Saussure)

panama Scullen (New Status) Honduras to Panama

*Cerceris insolita panama** Scullen, 1972:67. [Female holotype, 7 mi. se. Liberia, Costa Rica; USNM].

The female of this species is much like *C. bothriophora* and the males are close to *C. chiriquensis*. It is certainly not *C. insolita*, and I provisionally elevate the taxon to specific status until this species group can be more carefully studied.

(*parkeri* Scullen = *bakeri* Cameron)

(*percna* Scullen = *completa* Banks)

(*pilosa* Cameron = *imperialis* Saussure)

(*platyrhina* Viereck and Cockerell = *tapaneca* Saussure)

(*pleuralis* H. Smith = *rufopicta* F. Smith)

(*poculum* Scullen = *carrizonensis* Banks)

(*populorum* Viereck and Cockerell = *californica* Cresson)

(*posticata* Banks = *gnarina* Banks)

prominens Banks (Revised Status) e. U.S.

*Cerceris prominens** Banks, 1912:19. [Female lectotype, Falls Church, Virginia, designated by Ferguson (1983a); MCZ No. 13790].

Scullen (1965a) treated this taxon as a subspecies of *C. clypeata*, but I regard it as a distinct species based on the structure of the male clypeus.

psamathe Banks (Revised Status) e. U.S.

*Cerceris psamathe** Banks, 1912:21. [Female holotype, Fedor, Lee County, Texas; MCZ No. 13780].

Scullen (1951) incorrectly synonymized this species under *C. aequalis*, but they are distinct species.

(*pudorosa* Mickel = *convergens* Viereck and Cockerell)

(*pullata* F. Smith = *cribrosa* Spinola)

queretaro Scullen sw. U.S. to c. Mexico

*Cerceris queretaro** Scullen, 1972:91. [Female holotype, 41 mi. n. Queretaro, Mexico; USNM].

(*raui* Rohwer = *frontata* Say)

rhois Rohwer sw. U.S.

*Cerceris rhois** Rohwer, 1908:325. [Male holotype, Rio Ruidoso, White Mountains, New Mexico; USNM].

This species is very close to *C. halone* Banks, and it may prove to be a senior synonym. *C. rhois* has broader pale bands on the posterior terga than *C. halone*, and the tergal punctures tend to coalesce. In *C. halone* the punctures are separated by flat ridges.

(*rinconis* Viereck and Cockerell = *convergens* Viereck and Cockerell)

(*robertsonii* Fox = *rufopicta* F. Smith)

rohweri Ferguson se. Texas to s. Mexico

*Cerceris rohweri** Ferguson, 1983b:238. [Female holotype, 17 mi. ne. San Luis Potosi, San Luis Potosi, Mexico; USNM].

Cerceris ganderi Scullen, 1968:156. *Lapsus*.

Cerceris gandari Scullen, 1972:82. *Lapsus*.

As discussed by Ferguson (1983b) this species was misidentified as *C. gandarai* Rohwer by Scullen (1968, 1972).

(*rossi* Scullen = *fumurrubrum* Viereck and Cockerell)

(*rostrata* F. Smith = *simulans* Saussure)

rozeni Scullen New Jersey, Florida

*Cerceris rozeni** Scullen, 1971:130. [Female holotype, Archbold Biological Station, Highlands County, Florida; AMNH].

(*rubrata* Bohart and Menke = *compar* Cresson)

(*rufa* Scullen = *compar* Cresson)

rufinoda Cresson c. U.S. to c. Mexico

*Cerceris rufinoda** Cresson, 1865b:121. [Male holotype, Colorado; ANSP No. 1955].

*Cerceris argia** Mickel, 1916:412. [Female holotype, Lincoln, Nebraska; NEB]. **New Synonymy.**

This species was discussed under *C. crucis*.

(*rufonigra* Taschenberg = *militaris* Dahlbom)

rufopicta F. Smith se. Canada, e. U.S.

*Cerceris rufo-picta** F. Smith, 1856:467. [Male lectotype, St. John's Bluff, E. Florida, designated by Ferguson (1984); BMNH].

*Cerceris robertsonii** Fox, 1893a:55. [Female lectotype, Smithville, South Dakota, designated by Cresson (1928); ANSP No. 4755]. **New Synonymy.**

*Cerceris austrina** Fox, 1893b:556. [Female lectotype, Southern Florida, designated by Cresson (1928); ANSP No. 4756]. **Revised Synonymy.** Synonym of *C. robertsonii* by Scullen (1965a).

*Cerceris pleuralis** H. Smith, 1908:366. [Female holotype, Rock County, Nebraska; NEB]. **Revised Synonymy.** Synonym of *C. robertsonii* by Scullen (1965a).

*Cerceris robertsonii emmiltosus** Scullen, 1964:144. [Female holotype, Miami, Florida; USNM]. **New Synonymy.**

*Cerceris robertsonii bifidus** Scullen, 1965a:428. [Female holotype, Kill Devil Hills, North Carolina; USNM]. **New Synonymy.**

*Cerceris robertsonii miltosus** Scullen, 1965a:429. [Female holotype, Arcadia, Florida; USNM]. **New Synonymy.**

This species is variable both in color and in the shape of the membrane appended to the clypeal process of the female. Color varies clinally from north to south from a black and yellow form in the north to a black, yellow and red form in the southeastern United States to a black and red form in southern Florida. The names *robertsonii*, *pleuralis*, and *bifida* apply to the black and yellow form, and the remaining names apply to forms with variable amounts of red. The clypeal membrane of the female varies from the "*robertsonii*" shape to the "*bifida*" shape within the same population with all intermediate conditions present. (See Scullen 1965a, figs. 136a and 137a.)

(*salome* Banks = *halone* Banks)

(*sandiegensis* Scullen = *isolde* Banks)

(*sayi* Banks = *sexta* Say)

scapularis Schletterer (Revised Status) s. Mexico

*Cerceris scapularis** Schletterer, 1887:457. [Female lectotype, Orizaba, Mexico, designated by Scullen (1972); Vienna].

Scullen (1972) incorrectly synonymized this species under *C. simulans* Saussure. See discussion under *C. simulans*.

(*semiatra* Banks = *dilatata* Spinola)

(*seminigra* Banks = *azteca* Saussure)

semipetiolata Saussure s. Mexico to Panama

Cerceris semipetiolata Saussure, 1867:88. [Male holotype, Orizaba, Mexico; type not located].

*Cerceris williamsi** Scullen, 1972:54. [Female holotype, Fortin de las Flores, Veracruz, Mexico; CAS]. **New Synonymy.**

Synonymy is by sex association. Although Saussure described *semipe-tiolata* from a headless male, identification is possible from his description. The combination of long tergum I, coarsely ridged propodeal enclosure, and color pattern of the thorax and gaster is distinctive.

sexta Say sc. Canada to c. Mexico

*Cerceris sexta** Say, 1837:382. [Male neotype, Colorado, designated by Scullen (1965a); ANSP No. 5041].

*Cerceris biungulata** Cresson, 1865b:118. [Female holotype, Colorado; ANSP No. 1956]. Synonymy by Scullen (1960).

*Cerceris alceste** Mickel, 1918:333. [Female holotype, Mitchell, Nebraska; NEB]. **New Synonymy.**

*Cerceris fugatrix** Mickel, 1918:335. [Male holotype, Mitchell, Nebraska; NEB]. **Revised Synonymy.** Synonym of *C. stigmatosalis* Banks by Scullen (1965a).

*Cerceris sayi** Banks, 1923:21. [Female lectotype, Steele, North Dakota, designated by Ferguson (1983a); MCZ No. 14706]. **Revised Synonymy.** Synonym of *C. stigmatosalis* Banks by Scullen (1965a).

*Cerceris stevensi** Banks, 1923:22. [Female holotype, Steele, North Dakota; MCZ No. 14707]. **Revised Synonymy.** Synonym of *C. stigmatosalis* Banks by Scullen (1965a).

*Cerceris orphne** Banks, 1947:15. [Male holotype, Jemez Springs, New Mexico; MCZ No. 23536]. Synonymy by Scullen (1961).

There is much variation in the size and shape of the female clypeal process in this species. Pale markings vary from whitish in the northern plains and Canada to a deep yellow in the southern plains and again whitish in south central Mexico. Scullen (1965a, 1972) placed the whitish forms under the name "*stigmatosalis*," but the type of *stigmatosalis* Banks is a male of *C. halone* Banks. The names *C. sayi* and *C. stevensi* apply to the northern whitish form.

sextoides Banks sw. Canada to nw. Mexico

*Cerceris sextoides** Banks, 1947:10. [Female holotype, Lone Tree, Yakima River, Washington; MCZ No. 23547].

*Cerceris eurymele** Banks, 1947:11. [Female holotype, Davis, California; MCZ No. 23546]. Synonymy by Scullen (1965a).

(*shermani* Brimley = *halone* Banks)

(*simplex* F. Smith = *intricata* F. Smith)

simulans Saussure s. Mexico

Cerceris simulans Saussure, 1867:87. [Male holotype, Mexico; type not located].

*Cerceris rostrata*** F. Smith, 1873b:409. [Female holotype, Mexico; BMNH]. **New Synonymy.**

*Cerceris chrysogastra** Schletterer, 1887:458. [Male lectotype, Orizaba,

Mexico, designated by Scullen (1972); Vienna]. Synonymy by Scullen (1972).

C. simulans is identifiable from Saussure's original description and figures. Scullen (1972) identified the male, but he misassociated the female, as he treated *C. rostrata* as a separate species and incorrectly placed *C. scapularis* in synonymy as the female of *simulans*. *C. rostrata* shares the long tergum I, the basal platform on sternum II, and the fossette on tergum I with *C. simulans*, whereas these characters are lacking in *C. scapularis*.

(*singularis* Brethes = *binodis* Spinola)

(*smithiana* Cameron = *zapoteca* Saussure)

(*snowi* Banks = *convergens* Viereck and Cockerell)

(*solidaginis* Rohwer = *compacta* Cresson)

(*spinolae* Dahlbom = *binodis* Spinola)

squamulifera Mickel c. U.S.

*Cerceris squamulifera** Mickel, 1916:411. [Female holotype, Imperial, Nebraska; NEB].

This species is very close to *C. rufopicta*. However, the males which I have associated with it lack the sternal fimbriae present in *rufopicta*.

(*stevensi* Banks = *sexta* Say)

(*stigmatialis* Banks = *halone* Banks)

strigosa Cameron c. Mexico

*Cerceris strigosa** Cameron, 1890:110. [Female lectotype, Durango, Mexico, designated by Ferguson (1984); BMNH].

(*subpetiolata* Saussure = *cribrosa* Spinola)

tepaneca Saussure sw. U.S. to s. Mexico

*Cerceris tepaneca** Saussure, 1867:90. [Male lectotype, Orizaba, Mexico, designated by Scullen (1972); Vienna].

*Cerceris morata** Cresson, 1872:230. [Female lectotype, Texas, designated by Cresson (1916); ANSP No. 1944]. **New Synonymy.**

*Cerceris thermophila** Schletterer, 1887:463. [Female lectotype, Mexico, designated by Scullen (1972); Vienna]. **New Synonymy.** (Listed as both a synonym of *C. clypeata tepaneca* and as a good species by Bohart and Menke, 1976.)

*Cerceris nasica** Viereck and Cockerell, 1904:132. [Female holotype, New Mexico; ANSP No. 10382]. **Revised Synonymy.** Synonym of *C. morata* Cresson by Scullen (1942).

*Cerceris platyrhina** Viereck and Cockerell, 1904:133. [Female holotype, Fillmore Canyon, Organ Mountains, New Mexico; ANSP No. 10384]. **Revised Synonymy.** Synonym of *C. morata* Cresson by Scullen (1942), synonym of *C. vicina* Cresson by Scullen (1965a).

Scullen (1942) correctly placed *C. platyrhina* in synonymy under *C. morata*, but he later (1965a) incorrectly placed it in synonymy under *C.*

vicina Cresson. *C. tepaneca* is very close to *C. clypeata*, and Scullen (1972) treated it as a subspecies of the latter. However, he regarded *C. morata* to be a distinct species, and he separated the two by the distinctive red and yellow coloration of *C. morata* in the northern part of its range. All intergrades occur in a north to south cline from the red and yellow forms of the southwestern United States to the black forms with reduced yellow markings of southern Mexico. I separate *C. tepaneca* from *C. clypeata* on the basis of body sculpture.

texana Scullen Texas

*Cerceris texana** Scullen, 1965a:511. [Female holotype, Del Rio, Texas; KANS].

(*texensis* Saussure = *californica* Cresson)

(*thermophila* Schletterer = *tepaneca* Saussure)

(*thione* Banks = *femurrubrum* Viereck and Cockerell)

tolteca Saussure s. U.S. to Panama

*Cerceris toteca** Saussure, 1867:94. [Female lectotype, Cuantla, Mexico, designated by Scullen (1972); Geneva].

*Cerceris cosmiocephala*** Cameron, 1904:67. [Male holotype, San Marcos, Nicaragua; BMNH]. Synonymy by Scullen (1961).

townsendi Viereck and Cockerell New Mexico

*Cerceris townsendi** Viereck and Cockerell, 1904:140. [Male holotype, Las Cruces, New Mexico; ANSP No. 10389].

Ferguson (1984) discussed the identity of the holotype.

triangulata Cresson Cuba

Cerceris triangulata Cresson, 1865a:154. [Female holotype, Cuba; Havana?].

*Cerceris bilunata** Cresson, 1865a:155. [Male lectotype, Cuba, designated by Cresson (1916); ANSP No. 1957]. Synonymy by Alayo (1968).

Cerceris biliniata Schletterer, 1887:487. *Lapsus*.

trichiosoma Cameron c. Mexico

*Cerceris trichiosoma** Cameron, 1890:127. [Male holotype, Durango, Mexico; BMNH].

trinitaria Alayo Cuba

Cerceris trinitaria Alayo, 1968:10. [Female, male syntypes, Cuba; Havana?].

I have not seen this species.

truncata Cameron sw. U.S. to Costa Rica

*Cerceris truncata** Cameron, 1890:121. [Female lectotype, Temax, North Yucatan, Mexico, designated by Ferguson (1984); BMNH].

(*turrialba* Scullen = *militaris* Dahlbom)

(*unicincta* Taschenberg = *fumipennis* Say)

vanduzeei Banks sw. Canada to nw. Mexico

*Cerceris vanduzeei** Banks, 1917:114. [Female lectotype, San Diego County, California, designated by Ferguson (1983a); MCZ No. 10030].

*Cerceris complanata** Mickel, 1918:340. [Female holotype, Auburn, California; NEB]. Synonymy by Scullen (1960).

*Cerceris vanduzeei eburnea** Scullen, 1965a:399. [Female holotype, North Powder, Union County, Oregon; USNM]. Synonymy by Bohart and Grissell (1975).

(*varians* Mickel = *calochorti* Rohwer)

(*venator* Cresson = *bicornuta* Guerin)

(*venatrix* Schulz = *bicornuta* Guerin)

(*veracruz* Scullen = *mexicana* Saussure)

verticalis F. Smith se. U.S., ne. Mexico

*Cerceris verticalis*** F. Smith, 1856:466. [Female holotype, Georgia; BMNH].

*Cerceris gnara** Cresson, 1872:229. [Male lectotype, Texas, designated by Cresson (1916); ANSP No. 1938]. Synonymy by Scullen (1961).

*Cerceris firma** Cresson, 1872:229. [Female lectotype, Texas, designated by Cresson (1916); ANSP No. 1945]. Synonymy by Scullen (1961).

vicina Cresson nc. U.S.

*Cerceris vicina** Cresson, 1865b:120. [Female lectotype, Colorado, designated by Cresson (1916); ANSP No. 1939].

*Cerceris dakotensis** Banks, 1915:402. [Female lectotype, Fargo, North Dakota, designated by Ferguson (1983a); MCZ No. 13770]. **New Synonymy.**

Scullen (1965a) treated *dakotensis* as a subspecies of *clypeata*, but the type of *dakotensis* is clearly conspecific with *vicina* Cresson. The shape of the clypeal process is quite distinctive. In his determinations under the name *C. clypeata dakotensis* Scullen included specimens of *clypeata* and *prominens* as well as *vicina*. The range of *vicina* is allopatric with that of *C. tepaneca*, and I am able to separate males of *vicina* from males of *tepaneca* only on the basis of locality even though the females are quite distinct.

vicinoides Viereck and Cockerell (Revised Status) sc. U.S.

*Cerceris vicinoides** Viereck and Cockerell, 1904:140. [Female holotype, Pecos, New Mexico; ANSP No. 10387].

Scullen (1951) incorrectly synonymized this species under *C. aequalis* Provancher, but it is a distinct species.

(*viduata* F. Smith = *binodis* Spinola)

vierecki Banks (Revised Status) sw. U.S. to c. Mexico

Cerceris (Apiratrix) [sic] *vierecki** Banks, 1947:30. [Female holotype, Tempe, Arizona; MCZ No. 23544].

Cerceris (Apiratrix) [sic] *arizonella** Banks, 1947:32. [Male holotype, Tempe, Arizona; MCZ No. 23538]. **New Synonymy.**

Synonymy is by sex association. Scullen (1965a) left *C. arizonella* as an unrecognized species, and treated *vierecki* as a whitish subspecies of *C. finitima*. *C. huachuca* is a closely related whitish species, and *C. finitima*

occurs in a whitish phase also. A high percentage of Scullen's determinations under the name *vierecki* have been found to be *huachuca*. Bohart and Grissell (1975) synonymized *vierecki* under *finitima*, but I regard the two as distinct species.

(*viglii* Brethes = *dilatata* Spinola)

(*vulpina* F. Smith = *intricata* F. Smith)

watlingensis Elliott and Salbert San Salvador, Bahamas

*Cerceris watlingensis** Elliott and Salbert, 1979:359. [Female holotype, San Salvador Island, Bahamas; USNM].

(*williamsi* Scullen = *semipetiolata* Saussure)

wyomingensis Scullen c. U.S.

*Cerceris wyomingensis** Scullen, 1965a:519. [Female holotype, 28 mi. e. Laramie, Wyoming; USNM].

zacatecas Scullen c. Mexico

*Cerceris zacatecas** Scullen, 1972:98. [Female holotype, 9 mi. n. Ojo Caliente, Zacatecas, Mexico; UCD].

zapoteca Saussure (Revised Status) s. Mexico to Costa Rica

*Cerceris zapoteca** Saussure, 1867:89. [Male lectotype, Cordova, Mexico, designated by Ferguson (1984); Vienna].

*Cerceris smithiana** Cameron, 1890:119. [Female lectotype, Atoyac, Veracruz, Mexico, designated by Ferguson (1984); BMNH]. **New Synonymy.**

Scullen (1972) treated *zapoteca* and *smithiana* each as a subspecies of *C. kennicottii* Cresson based on color characters, but they represent opposite sexes of a distinct species. Most of Scullen's determinations under these names are *C. kennicottii*.

(*zelica* Banks = *jucunda* Cresson)

(*zobeide* Brimley = *clypeata* Dahlbom)

(*zonata* Cresson = *cubensis* Cresson)

(*zosma* Brimley = *clypeata* Dahlbom)

zumpango Scullen s. Mexico

*Cerceris zumpango** Scullen, 1972:38. [Female holotype, Zumpango, Guerrero, Mexico; UCD].

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